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EXAMINER	
ABDIN, SHAHEDA A	

ART UNIT	PAPER NUMBER
2629	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/697,056	HINCKLEY, KENNETH P.	
	Examiner	Art Unit	
	SHAHEDA A. ABDIN	2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ____ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☐ Claim(s) _____ is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) _____ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. The amendment field on 04/24/2008 has been entered and considered by Examiner.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-4, 12-20, 22-24 and 32-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chiu (US Pub No: 20050030255 A1) in view of Moehrle et al. (US Patent No: 6599130).

(1) Regarding claim 1:

Chiu teaches (in Fig. 3) method of coordinating resources (i.e. content) of mobile computing devices (i.e. laptop computers, notebook PCs, PDAs) to jointly execute tasks (i.e. by joining the received content on the plurality of displays and forming a modular display) [0017-0019], the method comprising:

receiving a first gesture input (i.e. receiving gesture from input device such as keyboard, mouse device, motion detector) at a first mobile computing device (e.g. Laptop computer) [0021], [0023];

receiving a second gesture input (i.e. receiving gesture from input device such as keyboard, mouse device, motion detector) at a second mobile computing device (e.g. Laptop computer) [0021] ;

determining (indicating or recognizing) whether the first and second gesture inputs form one of a plurality of different gesture types (e.g. move content, delete content, or transpose content, created by mouse device, key board and motion detector) [0021-0025] and [0050] ;

and if it is determined that the first and second gesture inputs (i.e. input from the laptop computers) form the one of the plurality of different gesture types [0022], then combining resources (content) of the first and second mobile computing devices to jointly execute a particular task (i.e. forming modular display system) associated with the one of the plurality of different gesture types (note that each display (on the modular system display) associated with a particular gesture stack and content fed to a particular display through a stack; the displays communicate with each other within a peer-to-peer type system and each display is aware is neighboring display through the content propagation and forming a modular display) [0024-0025] and [0051].

wherein determining (recognizing) whether the first and second gesture inputs form the one of the plurality of different gesture types (e.g. transpose gesture) further

comprises determining whether the first and second gesture inputs are synchronized in time (i.e. propagates in time) ([0021-0025], [0041]and [0050]).

Note that Chiu discloses gestures but Chiu does not explicitly disclose Synchronous gestures.

However, Moehrle in the same field of endeavor discloses synchronous gestures (column 2, lines 37-49, column 3, lines 55-60 and column 4, lines 35-60 and Fig. 3).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of invention to incorporate the method of synchronous gesture as taught by Moehrle in to the computing devices of Chiu so that the plurality of synchronous gesture could be determined. In this configuration the system would provide a reliable operation in the display devices with accurate data transmission (Moehrle, column 2, lines 30-49).

(2) Regarding claim 3:

Note that Chiu teaches first and second gesture input and Moehrle teaches determining (recording) the fist and second gesture inputs are synchronized in time further comprises determining whether the first and second gesture inputs are within a predetermined time period (i.e. session) (column 2, lines 37-49, column 3, lines 55-60 and column 4, lines 43-59, and Fig. 3). Thus the references of Chiu and Moehrie meet the claim limitations.

(3) Regarding claim 4:

Note that Moehrle teaches Synchronous gesture and Chiu teaches determining (recognizing) whether the first and second gesture inputs form the one of the plurality of different gesture types further comprises determining whether the first and second gesture inputs are of corresponding types (note that the gesture input will cause content to be presented in the particular display and initiate propagation of content along the configured direction in neighboring display which is interpreted the gestures are corresponding types) (see the abstract, [0021] and [0017]).

(4) Regarding claim 12:

Chiu teaches combining resources (i.e. content) of the first and second mobile computing devices (i.e. laptops) to jointly execute the task associated with the one of the plurality of different synchronous gesture types (e.g. move content, delete content, transpose content, flick gesture) [0021] and [0050] ; further comprises combining resources (i.e. content) of the first and second mobile computing devices to share display real estate (i.e. displays or tiles of the modular display device) ([0017] and [0051]).

(5) Regarding claim 13:

. Chiu t teaches combining resources (e.g. image or video contents) of the first and second mobile computing devices (e.g. laptops) to share display real estate (displays in the modular system) further comprises combining resources (image or

video contents) of the first and second mobile computing devices to jointly display the same image ([0020]).

(6) Regarding claim 14:

Chiu teaches combining resources of the first and second mobile computing devices (i.e. laptops) to share display real estate (i.e. displays in the modular system) further comprises combining resources (i.e. image or video contents) of the first and second mobile computing devices (laptops) to each display different portions of a single image (note that each display (on the modular system display) associated with a particular gesture stack and content fed to a particular display through a stack; the displays communicate with each other within a peer-to-peer type system and each display is aware is neighboring display through the content propagation and forming a modular display, therefore, for the video or image content different portions of a single image will form on each display of modular system) [0017], [0020] and [0051].

(7) Regarding claim 15:

Chiu teaches combining resources of the first and second mobile computing devices (i.e. laptops) to jointly execute the task associated with the one of the plurality of different synchronous gesture types (e.g. move content, delete content, transpose content, flick gesture) further comprises combining resources of the first and second mobile computing devices to transfer data from the first mobile computing device to the second mobile computing device ([0019]-[0021].

(8) Regarding claim 17:

Claim 17 is similar to claim 1. The limitation of claim 17 is differed from claim 1is processing circuitry and Chiu teaches this limitation (see[0056-0058]).

(9) Regarding claim 18:

Chiu teaches a network communicatively (peer-to-peer connection) coupling the first and second mobile computing devices (i.e. laptops)([0019-0020]).

(10) Regarding claim 19:

Chiu teaches the processing circuitry comprises processing circuitry (i.e. processor) of one or both of the first and second mobile computing devices ([0055-0058]).

(11) Regarding claim 20:

Chiu teaches wherein the processing circuitry comprises processing circuitry of the network [0019] and [0055-0058].

(12) Regarding claims 23-24:

Note that Claims 23 - 24 are similar to claims 3-4 respectively. The only limitation of claims 23-24 differed from claims 3-4 is processing circuitry and Chiu teaches this limitation (see [0056-0058]).

(13) Regarding claims 32-35:

Note that Claims 32-35 are similar to claims 12-15 respectively. The only limitation of claims 32-35 is differed from claims 12-15 processing circuitry and Chiu teaches this limitation (see [0056-0058]).

4. Claims 5 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chiu in view of Moehrle as applied to claim 4 above, and further in view of Trantow (US Pub. No: 20030222917 A1).

(1) Regarding claim 5:

Note that Chiu teaches receiving the first gesture input and second gesture input but both Chiu and Moehrle do not teach gesture input is an output of an accelerometer.

However, Trantow in the same field of endeavor teaches the gesture input is an output of an accelerometer (i.e. 32) of a computing device (10) ([0023]).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of invention to incorporate the method of gesture input as taught by Trantow in to the input devices of Chiu as modified by Moehrle so that first gesture input could be an output of an accelerometer of a first mobile computing device and second gesture input could be an output of an accelerometer of a second mobile computing device. In

this configuration the system would provide a reliable data transmission in the display device (Trantow, [0023]).

(2) Regarding claim 25:

Note that Claim 25 is similar to claim 5. The only limitation of claim 25 is differed from claims 5 processing circuitry and Chiu teaches this limitation (see [0056-0058]).

5. Claims 8-10, 21 and 28-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chiu in view of Moehrie as applied to claim 4 above, and further in view of Tran et al. US Patent No: 6157935).

(1) Regarding claim 8:

Note that Chiu teaches receiving the first gesture input and second gesture input on the first and second mobile computing devices but both Chiu and Trantow do not teach receiving an input which is indicative of proximity of a stylus to a screen mobile device.

However, Tran in the same field of endeavor teaches receiving an input which is indicative (e.g. display at 35) of proximity of a stylus (i.e. 33) to a screen mobile device (column 10, lines 25-45).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of invention to incorporate the method of proximity of a stylus as taught by Tran into the display system of Chiu as modified by Moehrle so that the first and second gestures inputs could be received an input individually which is indicative of

aproximity of a stylus to a screen of the first and second mobile computing devices. In this configuration the system would provide a high quality image in the display device (Tran, column 3, lines 26-33).

(2) Regarding claim 9:

Note that Chiu teaches first and second mobile computing devices and Tran teaches wherein proximity of the stylus (i.e. position of the tip of the stylus) to the computing device include contact of the stylus with mobile computing devices (column 10, lines 25-45). Thus the references meet the claim limitations.

(3) Regarding claim 10:

Note that Moehrie teaches synchronous gesture, Chiu teaches the first and second gesture inputs and Tran teaches gestures are indicative (i.e. by sensor) of whether a stitch type (i.e. the pressure of the pen tip) gesture has been formed (column 10, lines 25-45). Thus the references of Chiu, Moehrle and Tran meets the claim limitations.

(4) Regarding claim 21:

Note that Chiu does not teach the proximity server.

However, Tran teaches the proximity server (i.e. CPU 20) (column 10, lines 25-45). Thus the references of Chiu, Moehrle meet the claim limitations.

(5) Regarding claim 28-30:

Note that Claims 28 - 30 are similar to claims 8-10 respectively. The only limitation of claims 28-30 is differed from claims 8-10 processing circuitry and Chiu teaches this limitation (see [0056-0058]).

(6) Regarding claim 22: (Canceled)

6. Claims 6-7 and 26-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chiu, Moehrle and Trantow as applied to claim 5 above, and further in view of Kinawi (US Patent No: 6545669 B1).

(1) Regarding claim 6:

Trantow teaches the accelerometer and Chiu teaches first and second mobile computing devices are indicative (characterized according to the direction and speed) of whether the first and second mobile computing devices have been bumped (i.e. flick) [0021], but Chiu, Moehrle and Trantow do not teach computing devices bump against one another, thereby forming a bump type synchronous gesture.

However, Kinawi in the same field of endeavor teaches computing devices (i.e. two screens 11 and 12) bump against one another (note that screens are folding portable computer and the boundary adjacent the discontinuity 13 is used to trigger cross-discontinuity movement 42), thereby forming a bump type gesture (i.e. accidental signal which is exceeded the threshold velocity) (column 4, lines 44-67, column 10, lines 1-19).

Therefore it would have been obvious to a person of ordinary skill in the art at the time of invention to incorporate the method of indicative a bump type gesture as taught by Kinawi in to the display system of Chiu as modified by Moehrie, and Trantow so that first and second computing devices could be indicative of bumped gesture when first and second computing devices being bumped against one another , thereby forming a bump type synchronous gesture. In this configuration the system would have compact and less expensive display device with high quality data transmission (Kinawi, column 4, lines 44-55).

(2) Regarding claim 7:

Chiu teaches a method that receiving a touch sensor (e.g. UV sensor, motion detector) output from the first mobile computing device indicative of whether the first mobile computing device is being held during a potential bump type synchronous gesture (i.e. Flick) [0021]; and wherein determining (detecting by the speed of the gesture) whether the first and second gesture inputs form the bump type synchronous gesture (i.e. flick) comprises determining that the first and second gesture inputs form the bump type gesture (i.e. flick type gesture) only if the touch sensor output indicates that the first mobile computing device is being held (i.e. finger on computing device) (note that gesture is made with flick which is consisting of moving a finger from left to right on screen and the propagation from left to right which is indicating by touch sensor or detector and).

(3) Regarding claim 26-27:

Note that Claims 26-27 are similar to claims 6-7 respectively. The only limitation of claims 23-35 differed from claims 3-15 is processing circuitry and Chiu teaches this limitation (see [0056-0058]).

7. Claims 11 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chiu in view of Moehrle and Tran as applied to claim 10 above, and further in view of Kinawi.

(1) Regarding claim 11:

Note that Chiu teaches the first and second gesture inputs but Chiu, Moehrle and Tran do not teach scribble type synchronous gesture.

However, Kinawi in the same field of endeavor teaches scribble type synchronous gesture (i.e. 120 a, Fig. 14 a) (column 11, lines 8-45).

Therefore it would have been obvious to a person of ordinary skill in the art at the time of invention to incorporate the method of scribble gesture as taught by Kinawi in to the display system of Chiu as modified by Moehrie and Tran so that the first and second gesture inputs could be formed by indicating with scribble type synchronous gesture. In this configuration the system would have compact and less expensive display device with high quality data transmission (Kinawi, column 4, lines 44-55).

(2) Regarding claim 31:

Note that Claim 31 is similar to claim 11. The only limitation of claim 31 differed from claim 11 is processing circuitry and Chiu teaches this limitation (see [0056-0058]).

Response to Arguments

12. Applicants arguments field on 04/24/2008 have been fully considered but they are not persuasive.

Regarding claim1: Applicant argues that (1)" Moehrle teaches time and location synchronization of recorded gestures with a video, not determination as to whether first and second gestures are synchronous gesture types" . (2) Applicant further argues that the combination of Moehrle and Chiu cannot render independent claim 1 obvious.

In response (1), Examiner respectfully disagree Applicant's point of view. It should be noted that Applicant appears to misconstrue the teaching of Moehrle to be time and location synchronization of recorded gestures with a video. Moreover, Moehrle's reference clearly teaches first and second gestures are synchronous gesture (see Fig. 3). In column 4, lines 35-60 Moehrle discloses an antenna 55 which is indicated that a sessions may be remotely sent, accesses or shared by distance-learning techniques to facilitated remotely collaborated interpretation sessions. As indicated in Fig. 3. video processor 45 accept input from variety of sources (i.e. 57, VHS, DVD, MPEG) and transmitted to the interpretation layer 47 which governs gestures and comment recordation and displayed at 37. A session input line 65 is shown to synchronize together the interactive gestures i.e. interpretation layer

determine or detect the first gesture (i.e. gesture input or interaction from 57) and the second gesture (i.e. gesture inputs from 37) and they are synchronous in time.

Even assuming that the applicant is correct in arguing that Moehrle's reference does not teach " determining whether the first and second gesture inputs form the one of the plurality of different Synchronous gesture types ". The Examiner points out that Chiu alone would be sufficient to teach the above limitations. In paragraph [0024-0025] and Fig. 2, Chiu's reference implicitly teaches that the first and second gesture inputs (e.g. the directional arrows indicate with a propagation order from D0-D1 and D1-D2 and the propagation order will follow the direction of the gesture) from one of the plurality of different gesture type (e.g transpose gesture). After all the gesture inputs or interaction received through the multiple devices including touch screen, keyboard or other input devices, the gesture is interpreted at step 320 and recognized, determined at 340 (Fig. 3), [0029]) . Also note that the gesture based user interfaces that allow synchronous collaboration which is segmented in time.

In response (2), Examiner disagree Applicants points of view, that Claim 1 is rejected over Chiu in view of Moehrle. Chiu clearly teaches the limitations of claim 1 as discussed above in the rejection of claim 1. However, Examiner introduced Moehrle's reference to teach only synchronous gesture. Specifically Chiu's reference teaches that receiving a first gesture input (i.e. receiving gesture from input device such as keyboard, mouse device, motion detector) at a first mobile computing device (i.e. Laptop) [0021- 0023]; receiving a second gesture input (i.e. receiving gesture from

input device such as keyboard, mouse device, motion detector) at a second mobile computing device (e.g. Laptop computer) [0021-0022] .

However, Chiu does not explicitly disclose that the first and second gestures are inputted from one of a plurality of different synchronous gesture type. However, Moehrle in the same field of endeavor teaches deictic gestures (i.e. deictic gesture may be register by mouse cursor, touch screen, or light pen, column 2, lines 50-55) with synchronization (column 3, lines 55-60). Therefore, it would have been obvious to incorporate Moehire with chiu so that the plurality of synchronous gesture could be determined (see the discussion in claim 1 above). In doing so the system would provide a reliable operation in the display devices with accurate data transmission (Moehrie, column 2, lines 30-49). Therefore, the references of Moehrle and Chiu meet the claim limitations. Thus the Examiner's rationale for combination of Chiu and Moehrle is proper because this combination provides improvement over the Chiu and Moehrle and proper motivation that render an obvious combination.

Conclusion

13. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the malign date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Inquiry

14. Any inquiry concerning this communication or earlier communication from the examiner should be directed to **Shaheda Abdin** whose telephone number is (571) 270-1673.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Richard HJerpe** could be reached at (571) 272-7691. The fax phone number for the organization where this application or proceeding is assigned is 571-270-2673.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about PAIR system, see http://pari-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO

Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Shaheda Abdin

08/01/2008

/Richard Hjerpe/

Supervisory Patent Examiner, Art Unit 2629